

REMARKS

Reconsideration and allowance are respectfully requested in view of the foregoing amendments and the following remarks.

Claims 1 through 24 are pending in this application.

Claim 22 has been amended.

New claims 23 and 24 have been added.

REGARDING THE CLAIM OBJECTIONS

Claim 22 was objected to because of an informality. Applicant has amended Claim 22 to correctly recite "an apparatus of Claim 12." Applicant respectfully submits that the amendment to this claim neither broadens nor narrows Claim 22, but instead corrects an informal drafting error. Applicant respectfully requests that the objection to Claim 22 be withdrawn and submits that this claim is ready for allowance.

REGARDING THE SECTION 102 REJECTION

Claims 1, 2, 6, 10 through 13, 17 and 21 were rejected under 35 U.S.C. § 102(b) for being anticipated by Fukuzawa, et al. (U.S. Patent No. 5,502,565) (hereafter "Fukuzawa"). Applicant respectfully reverses this rejection.

Applicant respectfully points out that Fukuzawa teaches a head flying height measuring apparatus and method, in which a white light beam is directed into the region between the slider and the disk. The reflection of this beam of light is divided into components within a particular wave length, and this data is then used in determining the orientation and the flying height of the slider with respect to the disk.

It should be understood that, however, Fukuzawa relates to a flying height measurement apparatus and method on a point-by-point measurement basis. This is supported with respect to the text in the description of Fukuzawa in conjunction with Figures 4, 12 and 16a, b. A Fukuzawa measurement operation provides only one test result that relates to the flying height of the magnetic head. Fukuzawa understands that in order to test the full-flying state of a slider above a disk, information relating to not only the flying height, but also the orientation of the slider, must be obtained. To achieve this goal, the method disclosed in Fukuzawa must repeat the single-point flying height measurement multiple times in order to obtain sufficient information for calculating the head inclination. These

operations, as disclosed in Fukuzawa may require a total time of about 20 seconds in order to take about 15 point measurements. The Fukuzawa time period would be considered by those of ordinary skill in the art a “great improvement” compared to previous conventional methods of performing five points of measurement in about 90 seconds. However, because multiple point measurements are not achieved “simultaneously” a dynamic determination of the orientation of the slider or the full-flying status of the magnetic head is not taught, anticipated or achievable by Fukuzawa.

Regarding Claim 1 of the present application, this claim recites a method of dynamically determining the spatial position and orientation of slider positioned above a transparent disk. The method recites “simultaneously measuring values derived from one or more beams of light reflected from said spider-disk interface.” Applicant respectfully submits that Fukuzawa does not anticipate such simultaneous measurements of values derived from one or more light beams. As such, Applicant respectfully submits that Fukuzawa does not teach, allude to or anticipate Claim 1 and respectfully requests that the Section 102 rejection be withdrawn.

Claims 2, 6, 10 and 11 are either directly or indirectly dependent upon Claim 1 and are therefore not anticipated for at least the same reasons as discussed above with respect to Claim 1. Applicant respectfully requests that this Section 102 rejection be withdrawn.

Independent Claim 12 is directed toward an apparatus for dynamically determining the spatial orientation of a slider positioned above a transparent disk. Claim 12 recites a “measuring means for simultaneously measuring values of light properties of one or more beams of light reflected from said slider-disk interface.” Claim 12 further recites that “the simultaneously measured values respectively corresponding with multiple testing points on the surface of the slider which are spaced apart from each other.” As discussed above, with respect to Fukuzawa, Fukuzawa does not teach, allude to or anticipate simultaneously measuring values corresponding with multiple testing points on the surface of the slider. Applicant respectfully submits that Claim 12 is not anticipated by Fukuzawa and respectfully requests that this Section 102 rejection be withdrawn.

Claims 13, 17 and 21 are either directly or indirectly dependent upon Claim 12 and are therefore not anticipated for at least the same reasons as stated above with respect to Claim 12. Applicant respectfully requests that the Section 102 rejection be withdrawn.

REGARDING THE SECTION 103 REJECTION

Claims 3 through 5 and 14 through 16 were rejected under 35 U.S.C. §103(a) as being rendered obvious by Fukuzawa. Applicant respectfully traverses this rejection. Applicant respectfully points out that the Federal Circuit requires that some motivation or suggestion must be found in the prior art or other evidence of record that would have led one of ordinary skill in the art to produce the claimed invention in order to properly establish a *prima facie* case of obviousness. Applicant respectfully submits that a *prima facie* case of obviousness has not been made. The CCPA explained how it would evaluate a *prima facie* case in *In re Clinton*, 527 F.2d 1226, 188 U.S.P.Q. 536 (CCPA 1976). The Court required that first one must look at the references to determine whether “the references by themselves ... suggest doing what the inventor has done.” The Court next considered whether a person of ordinary skill in the art would, based on the cited art, have had sufficient basis for the required expectation of success. Applicant further points out that “a showing of a suggestion, teaching, or motivation to combine prior art references is an essential component of an obviousness holding.” An Examiner must express a motivation to modify a reference or else it is not a valid 103 rejection (*see In re Gordan*).

Applicant respectfully points out that Fukuzawa does not teach, allude to or render obvious anything similar to “simultaneously measuring values derived from one or more beams of light reflected from the slider-disk interface” wherein, the “simultaneously measured values respectfully correspond with multiple testing points on the surface of the slider.” Claims 3-5, 14 and 16 are each dependant, either directly or indirectly upon an independent claim. Fukuzawa makes no discussion or has any concern with simultaneous measure. As such, Applicant respectfully points out that *prima facie* case of obviousness was not established for the requisite claims. Applicant respectfully requests that the Section 103 rejection be withdrawn for Claims 3 through 5 and 14 through 16.

Claims 7, 8, 18 and 19 were rejected under 35 U.S.C. §103(a) for being rendered obvious by Fukuzawa and further in view of Sommargren (U.S. Patent No. 5,218,424). Applicant respectfully traverses this rejection. Again, Applicant respectfully points out that no motivation or suggestion is provided in the cited art that would have led one of ordinary skill in the art to produce the claimed invention. As such, Applicant respectfully submits that a proper *prima facie* case of obviousness has not been established. Sommargren, like

Fukuzawa does not teach, allude to or render obvious, simultaneously measuring values derived from one or more beams of light reflected from the slider-disk interface wherein the "simultaneously measured values respectfully correspond with multiple testing points on the surface of the slider." As such, Applicant respectfully points out that a *prima facie* case of obviousness was not established for the requisite claims. Applicant respectfully requests that the Section 103 rejection be withdrawn and submits that all claims are ready for allowance.

REGARDING THE ALLOWABLE SUBJECT MATTER

Applicant appreciates the Examiner's indication that Claims 9 and 20 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. As such, Applicant has added new Claims 23 and 24 which correspond to objected Claims 9 and 20, respectively, wherein Claims 9 and 20 have been rewritten in independent form to include all the limitations of the base claim and any intervening claims. Applicant respectfully submits that Claims 23 and 24 are ready for allowance.

In view of the above, it is believed that this Application is in conditioned for allowance and such a Notice is respectfully requested.

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Respectfully submitted,

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